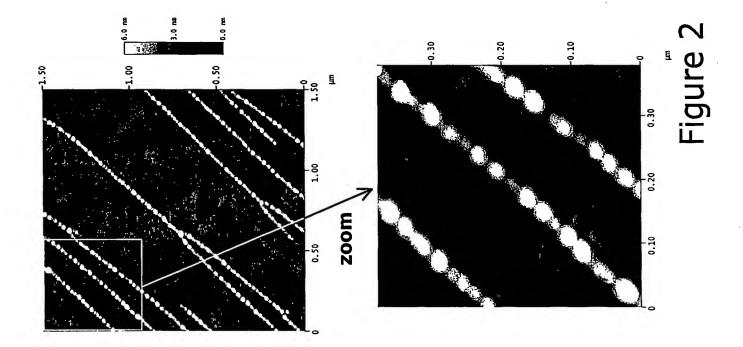


Figure 1



$$H_2NCONH_2 \longrightarrow NH_4^+NCO^- \longrightarrow NH_3 + HNCO$$
Urea melt

Ammonium

cyanate

 $Isocyanic$ 

acid

Reactions involving carboxylic acid groups

Reactions involving phenol groups

CNT OH + HNCO 
$$\longrightarrow$$
 CNT O NH<sub>2</sub> + CO<sub>2</sub>

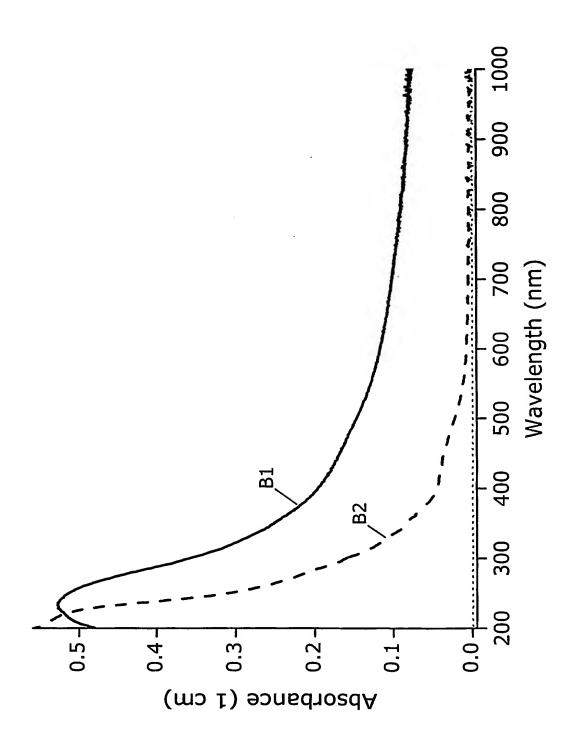
CNT ON NH<sub>2</sub> + n HNCO  $\longrightarrow$  CNT O NH<sub>2</sub>  $\longrightarrow$  CNT O NH<sub>2</sub>

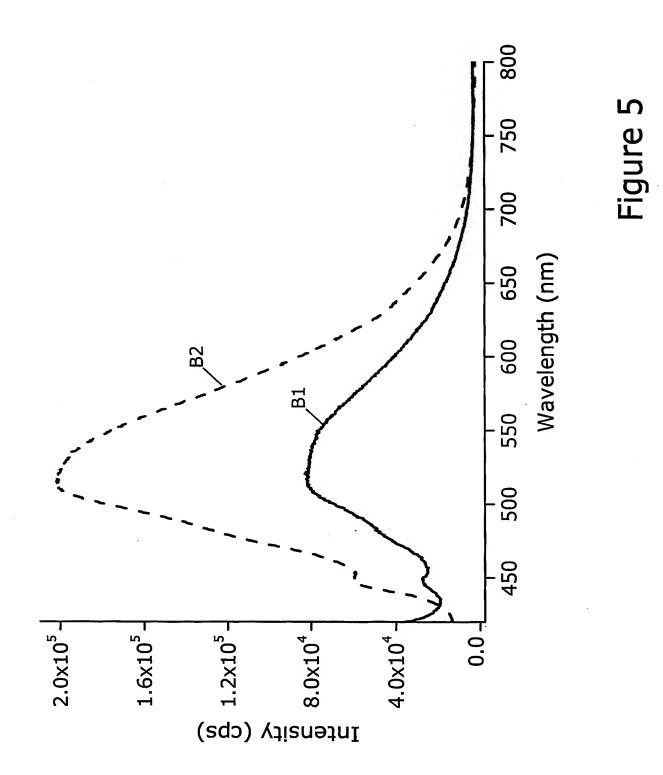
Reactions involving epoxide groups

Figure 3

10/538300







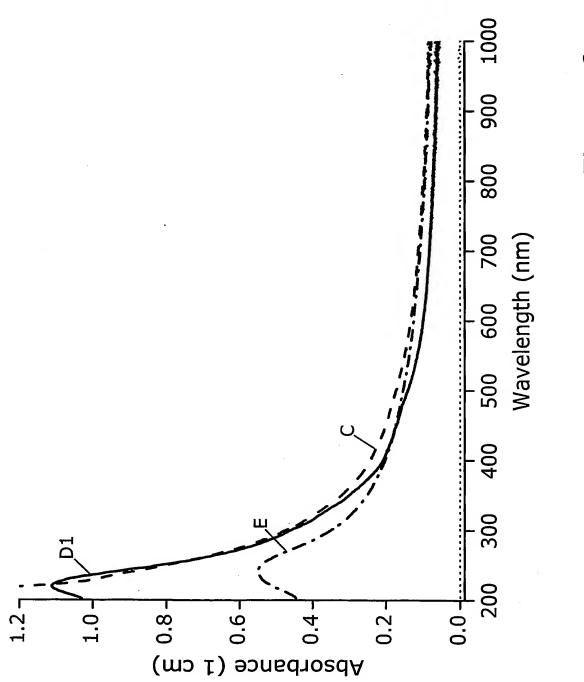
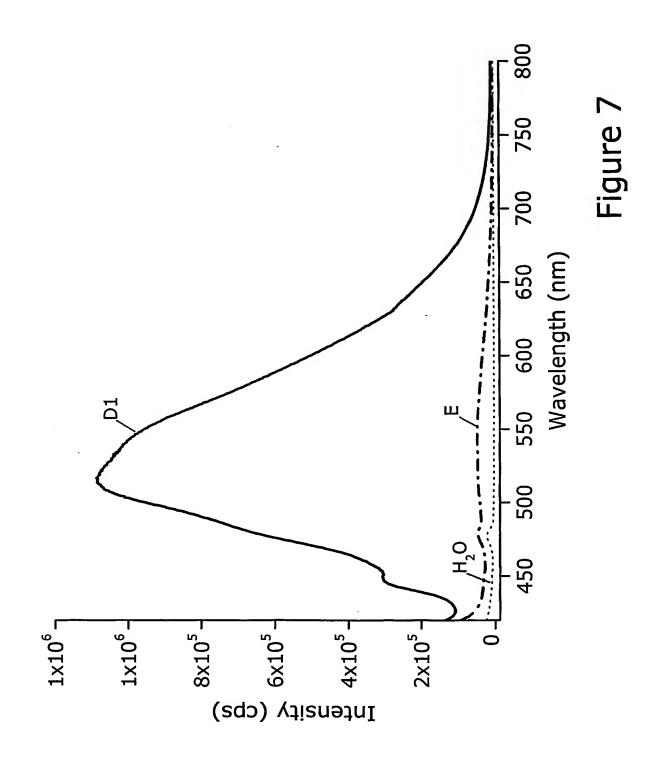


Figure 6



PCT/EP2003/010600

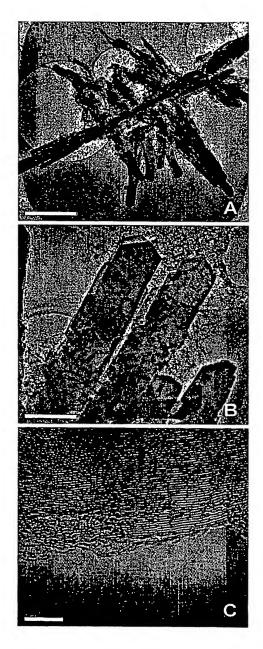


Figure 8

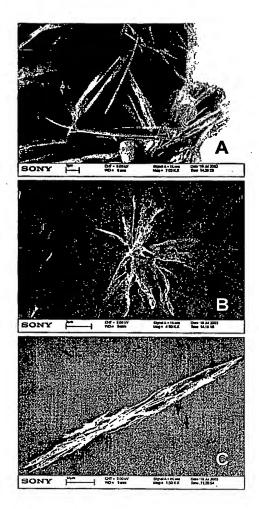


Figure 9

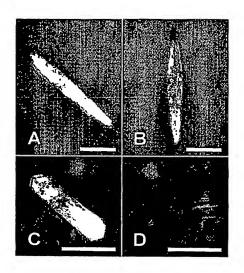


Figure 10

11/11

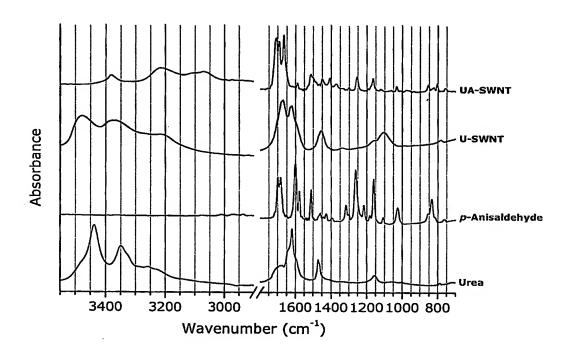


Figure 11